

## MEGARA DEVELOPMENTS AT LICA-UCM

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MEGARA Team

**LICA-UCM is the brand new laboratory for scientific advanced instrumentation (Laboratorio de Investigación Científica Avanzada) at Universidad Complutense de Madrid where MEGARA integration will take place.**

### 1. LICA FACILITIES

We are acquiring for LICA the basic tools and instrumentation needed in a laboratory intended for optical and electronic research with public funds (see later). Among them we highlight:

#### 1. Test bench for detector characterization

- Optical calibration and alignment tools (monochromator, arc lamp, optical system, etc.)
- SDSU detector controller
- Control and pressure controllers and sensors
- Vacuum system
- Calibrated photodiode
- Test detector
- LabView Software

#### 2. Test bench for VPH characterization

- Optical and alignment tools
- VPH sliced-pupil grating prototype

#### 3. Fibers characterization

#### 4. Software development test bench

Instruments and services from other UCM-CAI (Centros de Asistencia a la Investigación) are available on request. For instance Clean Room and Mechanical Workshop (Figure 1).



Fig. 1. Simon Tulloch carefully insert the test CCD into its socket, connected to the printed circuit board, under the watchful eye of Armando Gil de Paz (MEGARA's P.I.).

### 2. TRAINING

LICA is being used for teaching purposes and has hosted the IScAI trainee projects of Víctor Villar (2010, “Optical tests for large-formats holographic gratings and related-disperse elements”) and Daniel Aguirre (2011, “Test on MEGARA fiber bundles prototypes at LICA and Fun-in-the-lab miscellaneous projects”).

### 3. RESOURCES FOR LICA

LICA is part of Departamento de Astrofísica y CC. de la Atmsfera de la Universidad Complutense de Madrid and is beeing supplied with the necessary equipment with funds from Consolider-Ingenio GTC 2010 CSD2006-070, MICINN AyA2009-10368 and AyA2009-06330-E, Grupo de Astrofísica Extragaláctica e Instrumentación Astronómica (GUAIX-UCM), Comunidad de Madrid 04-AEC0913-000022/2009, CDTI IdC-20101106 (Fractal-UCM).

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